

510(k) Summary  
for the  
**Everest Spinal System**

This 510(k) summary for the Everest Spinal System is provided as required per Section 513(i)(3) of the Food, Drug and Cosmetic Act.

**1. Submitter :**

K2M, Inc.  
751 Miller Drive SE,  
Suite F1  
Leesburg, VA 20175

**Contact Person :**

Nancy Giezen  
K2M, Inc.  
Telephone: 703-777-3155

Date Prepared: 03/02/12

**2. Tradename:**

Everest Spinal System

**Common Name:**

Spinal Fixation System

**Classification Name:**

Spinal Interlaminar Fixation Orthosis (21CFR 888.3050), Pedicle screw spinal system (21CFR 888.3070),

**Device Product Code:**

KWP, MNI, MNH

**Regulatory Class:**

Class II

**3. Predicate or legally marketed devices which are substantially equivalent :**

- K2M Everest Spinal System (K081107)
- K2M Range Spinal System (K070229, K072914, K080792, K081381, K100851, K112037, K112920)
- K2M Caspian Spinal System (K081107, K092540, K093534, K103232, K113654)
- DePuy Mountaineer (K110353)

**4. Description of the device:**

The Everest Spinal System is a top-loading, multiple component, posterior (thoracic-lumbar) spinal fixation system which consists of pedicle screws, rods, locking set screws, and hooks. The purpose of this submission is to increase the range of screw sizes and to add connectors to enable use with Range Spinal System components.

**Materials:** The devices are manufactured from Titanium Alloy and Cobalt Chrome per ASTM and ISO standards.

**Function:** The system functions as an adjunct to fusion to provide immobilization and stabilization of the posterior thoracic and lumbar spine.

**5. Intended Use:**

The Everest Spinal System if used in conjunction with the Range (Mesa and Denali) Spinal Systems are:

Non-cervical, pedicle screw fixation devices for posterior stabilization as an adjunct to fusion for the following indications: Trauma ( i.e. fracture or dislocation ); spinal stenosis; curvatures (i.e. scoliosis, kyphosis; and/or lordosis); tumor; pseudoarthrosis; and failed previous fusion. It is also indicated for the treatment of severe spondylolisthesis ( grades 3 and 4 ) of the L5-S1 vertebra in skeletally mature patients receiving fusion by autogenous bone graft having implants attached to the lumbar and sacral spine ( L3 to sacrum) with removal of the implants after the attainment of a solid fusion.

Non-cervical, non-pedicle spinal fixation devices intended for posterior or anterolateral thoracolumbar screw stabilization as an adjunct to fusion for the following indications: degenerative disc disease (DDD ) (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and

radiographic studies ); spondylolisthesis; trauma ( i.e. fracture or dislocation ); spinal stenosis; curvatures ( i.e. scoliosis, kyphosis; and/or lordosis); tumor; pseudoarthrosis; and failed previous fusion.

**6. Comparison of the technological characteristics of the device to predicate and legally marketed devices :**

Proposed components of the Everest Spinal System were tested and compared to predicate devices. The modified Everest Spinal System constructs performed equally to or better than the predicates in static compression, static torsion and dynamic compression in accordance with ASTM F1717. The design features and sizing of the components were also compared and the Everest Spinal System was found to be substantially the same as these systems.

**7. Conclusion:**

There are no significant differences between the Everest Spinal System and other systems currently being marketed which would adversely affect the use of the product. It is substantially equivalent to these other devices in design, function, material and intended use.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room - WO66-G609  
Silver Spring, MD 20993-0002

K2M, Incorporated  
% Ms. Nancy Giezen  
Manager, Regulatory Affairs  
751 Miller Drive Southeast, Suite F1  
Leesburg, Virginia 20175

APR - 4 2012

Re: K120656  
Trade/Device Name: Everest Spinal System  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Pedicle screw spinal system  
Regulatory Class: Class II  
Product Code: MNI, MNH, KWP  
Dated: March 02, 2012  
Received: March 05, 2012

Dear Ms. Giezen:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,



*for* Mark N. Melkerson  
Director  
Division of Surgical, Orthopedic  
and Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

K120656

### Indications for Use

510(k) Number (if known): **K120656**

Device Name: Everest Spinal System

#### Indications for Use:

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Prescription Use  X   
(Part 21 CFR 801 Subpart D)

AND/OR

Over-the-counter Use    
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS-LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)

Division of Surgical, Orthopedic,  
and Restorative Devices

510(k) Number  K120656

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